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ABSTRACT

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Orchestrating Small Group Instruction In Elementary School Classrooms

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Abstract

Data from 12 2-hour observations of 41 elementary classrooms were used to investigate classroom management problems associated with the use of small group instruction. Student engagement during small group instruction was compared with that in whole class instruction, seatwork, and transitions. Classroom narratives of subsamples of seven better and seven poorer small group managers were read and rated on small group management variables. Findings from two-way analyses of variance suggested three main areas in which better managers excelled: setting the stage for small group work, maintaining the pace of small groups, and handling inappropriate behavior during small group work. Strategies used for managing small group instruction by a subsample of better small group managers are described.

Orchestrating Small Group Instruction in Elementary School Classrooms

Barbara Clements

Carolyn Evertson

Small group instruction is commonly used by elementary school teachers as a means of dealing with differing levels of student ability in a class. Although this type of instructional organization helps teachers to adjust instruction for individual ability levels and attention spans, it also presents some potential classroom management problems.

In the current study small group instruction was characterized by the division of students into groups of approximately three to 11 students for the purpose of instruction in reading, math, or language arts. During the period of time defined as small group instruction, the teacher was meeting with one or more small groups of students while the remaining students worked on individual seatwork activities, usually not directly supervised by an adult. The purpose of this study is to investigate the problems associated with the use of small group instruction in elementary school classrooms and to describe effective strategies for orchestrating small group instruction. Two major questions are addressed:

1. When small group instruction is compared with other activity formats (e.g., whole class instruction, seatwork, transitions) what differences in student task engagement and behavior are evident?

2. What strategies are used by better small group managers to maintain student task engagement and appropriate behavior during small group instruction? For example, how do better managers monitor the

understanding of work progress of students out of the small group? How does the teacher structure and control transitions between groups?

Research has demonstrated that student behavior is affected by instructional activities and format (Bossert, 1977; Good, 1979; Kounin & Gump, 1974; Stallings & Kaskowitz, Note 1). Associated with the use of small group instruction are a number of managerial problems that may have an impact on student behavior. Two major challenges in orchestrating or managing small group instruction include supervision and monitoring of the out-of-group students while the teacher is engaged with a small group of students, and structuring group changes and other transitions. Good (1979) described the problems associated with maintaining task engagement of out-of-group students, and Rosenshine (Note 2) reported the susceptibility to distraction of students who have a variety of activities to do and who are not directly supervised by the teacher. Anderson, Evertson, and Brophy (1979) discussed the need for handling inappropriate behavior without interrupting small group work and the importance of structuring the transition of students from group to group. Certain teacher capabilities, such as withitness and overlapping (Kounin, 1970) and goal setting and monitoring (Berliner, 1978) have been suggested as important to the effective use of small group instruction. More needs to be known, however, about specific strategies and steps used by effective teachers to orchestrate small group instruction and to provide maximum instructional time and student engagement.

Methods and Data Source

The data for this paper were obtained in 41 elementary school classrooms (grades one through six) in a large urban school district and

a small suburban school district in and near a large southwestern city. Teachers were participants in the Classroom Management Improvement Study, a field based experimental study (see Emmer, Sanford, Evertson, Clements, & Martin, Note 3, for more detail). The teachers were volunteers with a range of prior teaching experience from 0 to 12 years. All 14 schools in this study were ethnically/racially balanced, primarily because of a new program of crosstown busing in the large urban school district.

All the teachers in this study were observed on the first day of the school year, and seven times during the first 8 weeks of school. In January and February, four more observations were made of each class. Observations lasted an average of two hours each and approximately two-thirds of the observations were conducted in the morning. Observation data included descriptive narrative records of instructional and behavioral events; logs of time use; counts of students engaged in academic, procedural or off-task, unsanctioned activities, obtained every 15 minutes during the observation; and a set of summary ratings of specific teacher and student behaviors including measures of inappropriate and disruptive behavior, completed at the end of each observation by the observer. Observation data were collected by a team of trained observers, all of whom had classroom teaching and/or research experience. Following data collection activities, classroom narrative records for the first 8 weeks of school were read by staff members and summary ratings of management variables were completed for each teacher. These data yielded a rich base of information about student behaviors, teacher management characteristics, and time use in the classroom.

A measure of student engagement in various instructional modes was obtained by computing the mean student engagement rates for whole class, small group, seatwork, and transition formats for the 41 teachers in this study. Whole class activities included teacher led instructional presentations, discussions and recitations. Small group activities were noted when the teacher was making a presentation to a group of three or more students, while the rest of the students worked independently. The seatwork format was used when most of the students were working independently while the teacher supervised the class. The transition format was used when most of the students were moving into or out of the room or small group meetings or when students were getting out new materials for a different subject or activity within the room.

In order to identify and describe effective techniques for managing small group instruction, subsamples of better and poorer small group managers were identified, using a number of criteria. These criteria included: mean scores on the rating of effective small group procedures from the rating scales completed after each observation; ratings of efficient small group rules and procedures obtained from the narrative reader ratings; and individual mean rates of student task engagement and off-task, unsanctioned behavior during small group instruction formats.

Of 41 teachers in the sample, 40 used small group instruction. These 40 teachers were ranked on each of the four effectiveness criteria, and the ranks were summed. The seven teachers who were one standard deviation above the mean for all teachers and the seven teachers who were one standard deviation below the mean comprised the subsamples of better and poorer small group managers. In both

subsamples, three of the seven teachers taught primary grade classes (grades 1-3) and four of the seven teachers taught intermediate grade classes (grades 4-6). Nine schools were represented, with no more that two teachers in a subsample from the same school.

In order to obtain additional information about specific teacher behaviors which contributed to efficient small group instruction, each narrative record containing more than 20 minutes of small group instruction (96 observations total) was read and a set of Likert type ratings of management strategies completed. Reader reliability was checked by comparing ratings made by 20 pairs of readers who read the same narrative. Intraclass correlations estimating the reliability of the variables are shown in Table 1. Forty-seven of the 130 variables rated were reliable at the .05 probability level and 10 variables were reliable at the .10 probability level. Only these 57 variables were used to compare teachers in the two subsamples and to identify specific narratives containing examples of efficient small group management.

For each of the subsample teachers' observations, general information was collected about the use of small group instruction in the subsample teachers' classrooms. It was found that small group instruction was used for reading instruction in 85% of the 96 observations read, for other language arts instruction in 29% of the observations, and for math in 21% of the observations. Small group instruction was used by all 14 subsample teachers for reading, by eight teachers for language arts and by seven teachers for math. Students from other classes (as in a team-teaching situation) entered the subsample teachers' classes for reading in 31% of the observations, for other language arts in 7% of the observations, and for math in 16% of

the observations. Small group instruction was also used for spelling, foreign language (Spanish), and science on only one or two occasions. Small groups ranged in size from two to 23 students with a mean of seven per group and a mode of six per group.

Results and Discussion

Student Behavior in Different Activity Formats

T-tests were used to identify significant differences in student behavior in whole class instruction, small group instruction, seatwork, and transitions in the 41 classes in the CMIS sample (Table 2). Analyses indicated that there was significantly less off-task, unsanctioned student behavior and more on-task behavior during whole class instruction than during either small group instruction or seatwork. There were no differences between small group instruction and seatwork on these variables. During transitions, more off-task, unsanctioned and less on-task behavior occurred than during whole class activities, and more off-task, unsanctioned behavior occurred during small group instruction and seatwork activities than during transitions in the CMIS sample.

The differences in student behavior between whole class and small group instruction reflect the relative ease in supervising and maintaining direct control over students while conducting whole class activities. Managing the behavior of out-of-group students while working with a small group presents greater difficulty. The differences between student behavior in whole class instruction and seatwork activities may be related to the interactive nature of the activities. While instructing the whole class, the teacher is constantly monitoring the whole class to get information about student understanding as well

as behavior. When students are involved in individual seatwork activities, the teacher may fail to monitor all of the students simultaneously, especially when giving help to an individual student. These results are consistent with the findings of Kounin, Friesen, and Norton (1966) that there was more on-task behavior in active, teacher led segments than during seatwork formats. Gump (Note 4) confirmed their findings and further reported no significant differences in off-task behavior between teacher supervised seatwork and seatwork while the teacher was busy elsewhere (such as instructing a small group). This is consistent with our finding of similarities in behavior in small group instruction and seatwork activities. Gump suggested that the differences may be related to whether the activity entailed external pacing (by the teacher) or internal pacing (by the student). This suggestion may be relevant to the finding of significantly more off-task behavior during seatwork and small group instruction than during transitions. Information obtained from the narrative reader ratings indicates that most of the inappropriate behavior during small group instruction is attributable to out-of-group students involved in seatwork activities. It is probable that teachers are likely to monitor, direct, and pace transitions more carefully than seatwork or small group instruction, thus enabling teachers to discover and stop inappropriate behavior more quickly. Finding higher student task engagement during whole class instruction than during other formats does not support Bossert's (1979) hypothesis that whole class instruction is more susceptible to disruption than other class organizational patterns.

Management Strategies

In order to address the question of what strategies were used by better small group managers to maintain student task engagement and appropriate behavior during small group instruction, narrative reader ratings were used to compare teacher and student behaviors in classes of better and poorer small group managers in the CMIS. In a two-by-two analysis of variance, group membership (better managers vs. poorer managers) was used as one independent variable, and grade level (primary vs. intermediate) was used as the other independent variable. Of the 57 reliable variables, three variables consisted of the "other" category and were not usable. The results of the two-way ANOVAs are presented in Table 3.

The purpose of these analyses was to identify specific teacher behaviors that differentiate better small group managers from a group of poorer small group manangers in the CMIS. Findings suggested three main areas in which better managers excelled. These areas and the related variables are:

Setting the stage for small group work. Before leaving students in seatwork, better small group managers questioned students to be sure they understood assignments significantly more often than poorer small group managers. In addition, better small group managers tended more often to state expected comportment of out-of-group students (e.g., noise level, amount of movement, etc.) before group work began or between small groups, and to make specific statements about how far students should proceed with assignments during a specific period of time.

Maintaining the pace of small groups. Students in better managers' classes were rated significantly higher on moving quickly and

automatically into and out of small groups (as opposed to dawdling and having to be reminded). Before dismissing a small group, better managers more often gave feedback to small group students on their academic performance. Between small groups, better managers tended more often to give help to students who raised their hands or otherwise requested help. Poorer managers, on the other hand, tended more often to do paperwork, to search for materials, or to do other noninteractive tasks between small groups.

Handling inappropriate behavior during small group work. Better small group managers had significantly fewer out-of-group students involved in inappropriate behavior and somewhat fewer out-of-group students involved in disruptive behavior. In classes of poorer small group managers, there tended to be more out-of-seat movement and talking by out-of-group students, and significantly more of these behaviors were off-task, unsanctioned or unacceptable to the teacher. Better managers were significantly more accurate in targeting students for inappropriate behavior; in fact, poorer managers significantly more often did not see inappropriate behavior by out-of-group students. After identifying inappropriate behavior, better small group managers were significantly better at stopping it quickly and accurately, causing it to stay stopped.

Very few significant differences were found between grade levels. Primary teachers, particularly better primary managers, questioned students more to be sure they understood instructions. Intermediate teachers tended to give more instructions for seatwork to students during small groups. Between small group meetings, primary teachers tended to wait more often for students in the small group area. Primary teachers also provided more types of post-assignment activities. They

used significantly more listening centers and somewhat more often allowed students to color pictures when their work was finished. In addition, only poorer primary managers had non-instructional games for students to use when assignments were completed.

In order to provide a comprehensive picture of how better small group managers in the CMIS conducted small group instruction, classroom narratives were reexamined to get additional information about the three aspects of small group instruction described above and about any behaviors not covered by the original reader ratings. These descriptive findings are presented below.

Setting the stage for small group work. Better small group managers carefully set the stage for the period of time to be spent in small group instruction. After waiting to be sure all students were attending, teachers gave assignments orally (usually writing them on the chalkboard), then checked to be sure all students understood what was to be done either by asking questions or by having students repeat the instructions aloud. Better primary managers spent the greatest amount of time giving instructions and having students do examples alone or in unison before allowing the students to work on their own. An example of the type of instructions given by better primary managers follows:

> [Teacher] then says, "Now you can tear out page 125. Put your language book in your desk and put your pencil down." She then says to one little girl, "Put your crayons up, baby." She calls the students "baby" quite a bit. She then says, "As soon as your green books are put away, I will know you are ready." Teacher then begins instructions. She has the students put fingers on their heads if they are ready with an answer to a question. She then tells all the students to put their finger on the fourth word in the second row and she goes around to make sure that all of the students have their finger on the right word. She then says, "What is that word? Spell and read that word." The students do this. "Now find a synonym for fast in the next part."... She then tells the

> students, "Now go to the third row, second word. Read that word, and then find the synonym for it in the block. Put your thumbs up when you find it. Be quick, look, and think."

Better managers expressed expectations for behavior of out-of-group students by making proactive statements such as, "I'll be looking to see who's quiet today." or, "There's no time to talk or fool around." They sometimes reminded students that this was the time to ask questions because they would be unavailable for questions while working with the small group. One better manager told students, "Okay, people, don't come up while I'm checking. Save your questions."(T 03, 9/24, p. 3) Better managers then waited to be sure all students were started on their assignments before beginning work with a small group.

Better small group managers had well established rules and procedures for small group work. One better primary manager reviewed the rules for new students when new students joined her class after 3 weeks of school.

> The teacher is standing at the front of the room; and she says that since there are some changes in the grouping, she wants to go over the rules for the new reading students. The teacher talks about come-ups then and tells them that if they need to go to the restroom, they don't need to ask. They simply come up and get the tag and go. They must make sure that they really need to, because they can only go once in the morning during the reading group period. The teacher tells them that if they have any questions, they are to wait until she gets through with the group and she will come around and answer all of them. (T 26, 9/16/80, pp. 7-8)

Better small group managers frequently reinforced their expectations about student behavior by requesting that students move quickly and quietly into the small group area and by complimenting students after they had arrived. As a result, students in their classes moved quickly and automatically into the small group area without dawdling and having

to be reminded where to go and what to bring. Better managers monitored movement of both in-group and out-of-group students making sure all were settled before beginning small group instruction.

Maintaining the pace of small group activities. Better managers also differed from poorer managers in their skills of pacing and sequencing activities during small group instruction. Before beginning a small group, better managers waited for all of the students in the group to have their materials ready and to be attentive. Better primary managers in particular often reminded students what materials to bring to group before they moved into the group, then checked to be sure all students were following directions. An example of this is the way a first-grade teacher complimented students "on the way they are sitting on the rug with their legs crossed. 'But have I asked you to open your books?' Someone answers, 'No.' Teacher says, 'O.K.' Students close their books." (T 34, 9/30/80, p. 18)

While a small group was in progress, better managers monitored the room carefully looking for signs of confusion or student questions. Some teachers allowed students to come up and whisper questions to the teacher if it did not interfere with the flow of activity in the small group. Sometimes teachers would leave the group members working on a task and go answer student questions.

> Occasionally when the students in the small group are working on a text page all by themselves, the teacher gets up and goes to give individual help to other students in the class, especially if they raise their hands. Occasionally, she'll call out the student's name, and she'll ask them what's wrong and gives some help from her place in the group. She seems to know which students are going to need her to go over and work with them and which ones she can call out the answer to a question. (T 26, 1/27/81, p. 8)

Other times teachers asked students to wait by saying, "Mary, I'll be with you as soon as I finish with the group." (T 26, 1/15/81, p. 12)

Most of the better managers reinforced appropriate behavior of out-of-group students by making statements such as the ones that follow:

> "I like the way Nancy is working, but I'm not sure about Steven. Steven, you need to be writing as you are reading. Get busy. I like the way Carol is working." (T 32, 1/5/81, pp. 13-14)

Before dismissing a small group, teachers in both subsamples, particularly intermediate teachers, frequently gave instructions for seatwork activities. Better managers again checked to be sure students understood what they were supposed to do. After giving instructions for an assignment one teacher said,

> "Are there any questions?" No one says anything. Then the teacher says, "Are you sure? Because once I send you back I don't want to talk to you again. Any more questions? Now there are five things for you to do." She reviews the five steps that they should go through today. The students were satisfied that they know what to do and returned to their seats. (T 13, 2/9/81, p. 12)

In addition, better managers usually provided academic feedback to group members. This positive reinforcement for the academic group activities seemed to serve as encouragment to students to continue doing well when they were working at their seats.

After dismissing a group, better managers tended to spend more time interacting with students, giving help and answering questions, than did poorer managers, who more often tended to do paper work, search for materials, or do other noninteractive tasks. Better managers also tended to make more time-orienting statements to students, that is, specifying how long it should take to finish an assignment or how much

work should be done in a specified period of time, such as, "Boys and girls, you have 10 minutes to finish your work."

Handling inappropriate behavior during small group work. The third area in which major differences were found between better and poorer small group managers was in the handling of inappropriate behavior during small group work. Better managers were rated as having significantly less inappropriate behavior of out-of-group students and somewhat less inappropriate behavior of in-group students than poorer managers. Better managers were rated as being more accurate in identifying students who were misbehaving and more successful at stopping inappropriate behavior quickly and accurately. Poorer managers, on the other hand, were more likely not even to see inappropriate behavior of out-of-group students. Better managers more carefully monitored the behavior of all of the students in the class. When possible they used unobtrusive interventions (such as eye contact or a finger to the lips) from their place in the small group. They also made statements about what students were supposed to be doing or what was expected of them. These statements served to remind students what to do and informed students that their behavior was being monitored. Examples of these types of statements include the following:

> She says, "Boys and girls, I said that if you have a question, talk softly so that you won't disturb us, just like we're talking softly so that we don't disturb you." (T 34, 9/30, p. 20)

> Then the teacher says in a voice that the whole class can hear, "Rita is doing what I expected her to do, so is John." The students get the message and most of them settle down and get quiet. (T 13, 2/09, p. 14)

There were some ratings of small group rules and procedures on which teachers in the two subsamples did not differ. There were no

significant differences in the procedures used for turning in a completed assignment. All subgroups of teachers used a variety of methods. Variables dealing with how assignments were checked also showed that a variety of techniques were used by all subgroups. Assignments were most frequently checked in small groups or were turned in to be checked by the teacher.

Summary and Conclusions

The use of small group instruction is associated with a number of problems due partly to the complexity of the activity in which students are doing a number of different tasks and moving between activities at different rates, and partly to the fact that many students must work without direct teacher supervision during this period of time. This study represents an attempt to learn some of the strategies used by effective small group managers to maintain task engagement and appropriate behavior during small group instruction. The results are limited, however, by the size of the sample and by the use of a data base that was not specifically directed toward the use of small group instruction. As a result, information about how these teachers introduced small group work to their students is incomplete.

In general better small group managers in this study made sure students knew what was expected of them during the period of time to be spent in small group instruction. They then monitored for academic and behavioral compliance prior to and throughout this period. Deviations from acceptable behavior were handled quickly and without disruption. These behaviors contributed to a smooth-running classroom in which maximum time could be spent in academic activities.

The dimensions observed in this study that seemed to distinguish between better and poorer small group managers are consistent with dimensions observed in other studies of effective teaching. For instance, Doyle (1979) noted a number of general teacher skills and behaviors relevant to small group instruction and similar to the areas that were found important in this study. Among these general behaviors and skills are:

1. The establishment of efficient routines to increase understanding and predictability and facilitate movement between activities;

2. the ability to monitor all students during complex activity structures; and

3. the ability to recognize inappropriate behavior and stop it quickly before it spreads.

This study has provided information on some of the specific techniques better small group managers used to increase student involvement in work and improve student behavior during small group instruction. More research, however, is needed to provide information on how effective small group procedures are established, including optimum time for introducing small group instruction and amount of time spent in explaining procedures and expectations. These areas are particularly relevant at lower elementary grades when students are less experienced with this format. Such information along with the findings of this study could be used to suggest guidelines for small group management.

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Table 1

Reliabilities (Intraclass Correlations) of Narrative Variables

Used to Compare Teachers in Small Group Instruction

Variable	Reliability	Significance Level $p <$
*Teacher gives assignments orally (assignments not posted)	.89	.001
*Assignments posted, teacher does not go over orally	.67	.01
*Assignments posted, teacher goes over orally	.75	.01
*Students get assignments in individual written contracts	1.00	.001
*Teacher gives assignments in small group	.62	.02
*Students get assignments in other way	1.00	.001
*Teacher tells students in which order different tasks should be done	.00	ns
Teacher states expected comportment of out-of-group students before group work begins or in between groups	.56	.04
Teacher states expected comportment of small group students while preparing to meet	.77	.001
Teacher makes statements about how far students should get on assignments during a specific time period	.78	.001
*Teacher tells students what to do when they have finished with their seatwork assignments	.80	.001
Teacher questions students to be sure they understand assignments	.60	.02
*Teacher uses a bell to signal when it is time for a group to meet	1.00	.001
*Teacher goes to a certain location when it is time for a group to meet	.65	.01

Table 1, continued

Variable	Reliability	Significance Level p <
*Teacher says something when it is time for a group to meet	.00	ns
*Time on clock signals it is time for a group to meet	.00	ns
*Another signal is used to let students know it is time for a group to meet	.00	ns
*Teacher calls group by name or number to signal which group is meeting	.39	ns
*There is a set schedule for which order the groups meet	.50	.06
*It is posted on the chalkboard or elsewhere in the classroom the schedule for group meetings	1.00	.001
*There is another way for students to know which group is meeting	.00	ns
*Teacher tells students what materials to bring to group when she calls them to group	.59	.03
*Teacher tells students what materials to bring to group when presenting instructions for group work	1.00	.001
*There is a set procedure for what materials students are supposed to take to group	.12	ns
*It is posted on the chalkboard or elsewhere in the classroom what materials students are supposed to take to group	1.00	.001
*There is another way for students to know what materials to take to group	.00	ns
Students move quickly and automatically into and out of small group	.71	.01
Teacher waits for all group members to be present and attentive before starting	.00	ns

Table 1, continued

Variable	Reliability	Significance Level $p <$
Number of students in the classroom visible to teacher while s/he was working with a small group	.18	ns
Amount of time between when teacher calls for a small group and its beginning	.87	.001
*Teacher tells students what to do if they need help while s/he is meeting with a small group	.39	ns
Students go up to teacher meeting with a small group when they need help	.50	.07
Students go to a peer tutor when they need help while teacher is meeting with a small group	.00	ns
Students talk to a neighbor when they need help while teacher is meeting with a small group	.19	ns
Students sit in dead time when they need help while teacher is meeting with a small group	.89	.001
Students raise their hands when they need help while teacher is meeting with a small group	.62	.02
Out-of-group students ask questions about directions of the teacher while s/he was meeting with a small group	.00	ns
Out-of-group students ask questions about content of the teacher while s/he is meeting with a small group	.00	ns
Out-of-group students make personal requests of the teacher s/he is meeting with a small group	.00	ns
Out-of-group students make complaints about other students' behavior while teacher is meeting with a small group	.00	ns
Students turn in finished assignments to a special box or location	.49	.07

Table 1, continued

Variable	Reliability	Significance Level $p <$
Students place finished assignments in a folder at their desks	.97	.001
Students do nothing specific with finished assignments	.58	.04
Students hand finished assignments to teacher	.62	.02
Students do some other thing with finished assignments	.00	ns
Assignments are checked orally in class	.00	ns
Assignments are checked in small groups	.71	.01
Assignments are handed in, checked by the teacher	.48	.08
Assignments are checked individually by students using a key	.00	ns
Assignments are checked by the teacher individually with the student	.51	.06
*Assignments are checked some other way	.00	ns
Between meetings with small groups, teacher gives help to students who request it	.67	.02
Between meetings with small groups, teacher checks on progress of students	.65	.03
Between meetings with small groups, teacher makes an academic presentation	.75	.01
Between meetings with small groups, teacher discusses behavior of the students	.00	ns
Between meetings with small groups, teacher does paperwork, searches for materials	.56	.08
Between meetings with small groups, teacher sits and waits for next group	.68	.02

Table 1, continued

Variable	Reliability	Significance Level $p <$
Between meetings with small groups, teacher checks or grades an assignment	.21	ns
Between meetings with small groups, teacher does some other task	.00	ns
Before dismissing a small group, teacher gives instructions for work	.49	.09
Before dismissing a small group, teacher states expectations for student behavior	.00	ns
Before dismissing a small group, teacher gives students academic feedback	.96	.001
Before dismissing a small group, teacher gives students behavioral feedback	.11	ns
Before dismissing a small group, teacher gives students information about when their work is due	.19	ns
Number of students who used post-assignment activities	.90	.001
*When students finish assignments, they can read books	.22	ns
*When students finish assignments, they can play instructional games	.79	.001
*When students finish assignments, they can play non-instructional games	1.00	.001
*When students finish assignments, they can use listening center	1.00	.001
*When students finish assignments, they can color pictures	.50	.06
*When students finish assignments, they can do art activities	.00	ns
*When students finish assignments, they can do science experiments	.00	ns

Table 1, continued

Variable	Reliability	Significance Level $p <$
*When students finish assignments, they can go to the library	.63	.02
*When students finish assignments, they can do something else	.50	.06
Amount of inappropriate behavior of out-of-group students	.86	.001
Amount of inappropriate behavior of in-group students	.68	.001
Amount of disruptive behavior of out-of-group students	.63	.02
Amount of disruptive behavior of in-group students	.49	.07
Teacher is accurate in targeting students for inappropriate behavior	.86	.001
Teacher quickly stops inappropriate behavior of out-of-group students	.57	.05
Teacher handles out-of-group inappropriate behavior while seated with group, with no interruption of group work	.07	ns
Teacher handles out-of-group inappropriate behavior while seated with group, causing a disruption of instruction	.68	.02
Teacher leaves small group to handle out-of-group inappropriate behavior, small group members work on a task	.07	ns
Teacher leaves small group to handle out-of-group inappropriate behavior, small group members in dead time	.00	ns
Teacher ignores out-of-group inappropriate behavior	.41	ns
Teacher makes desist statements to individuals in response to out-of-group inappropriate behavior	.68	.02

Table 1, continued

Variable	Reliability	Significance Level p <
Teacher makes desist statements to whole class in response to out-of-group inappropriate behavior	.16	ns
Teacher cites rules and procedures in response to out-of-group inappropriate behavior	.00	ns
Teacher uses non-verbal contacts in response to out-of-group inappropriate behavior	.77	.01
Teacher threatens to punish a student in response to out-of-group inappropriate behavior	.00	ns
Teacher punishes a student in response to out-of-group inappropriate behavior	.00	ns
Teacher does not see out-of-group inappropriate behavior	.65	.02
Teacher does something else in response to out-of-group inappropriate behavior	.59	.05
Amount of out-of-seat movement of out-of-group students	.87	.001
Amount of out-of-seat movement that was work related	.20	ns
Amount of out-of-seat movement that is off-task, sanctioned	.12	ns
Amount of out-of-seat movement that is off-task, unsanctioned	.85	.001
Amount of talking among out-of-group students	.81	.001
Amount of talking that is work related	.35	ns
Amount of talking that is off-task, unsanctioned	.64	.02
Teacher quickly stops inappropriate behavior of in-group students	.00	ns

Table 1, continued

Variable	Reliability	Significance Level $p <$
Teacher ignores inappropriate behavior in the small group	.00	ns
Teacher makes a desist statement to an individual in response to small group inappropriate behavior	.00	ns
Teacher makes a desist statement to the group in response to small group inappropriate behavior	.00	ns
Teacher cites rules and procedures in response to small group inappropriate behavior	.00	ns
Teacher uses non-verbal contact in response to small group inappropriate behavior	.00	ns
Teacher threatens to punish a student in response to small group inappropriate behavior	.00	ns
Teacher punishes a student in response to small group inappropriate behavior	.00	ns
Teacher does not see small group inappropriate behavior	.00	ns
Teacher does something else in response to small group inappropriate behavior	.00	ns

*2-point scale; all others are 5-point scales

Note: Fourteen variables were dropped from the analysis because infrequent occurrence made their assessment impossible.

Table 2

Differences in Student Behavior for Various Lesson Formats

Lesson Type	$\bar{X}$	2	3	4
	On-Task Scores			
Whole Class Activities	.9657	$p < .001$	$p < .001$	$p < .001$
Small Group Instructions	.9135		$p < .880$	$p < .081$
Individual Seatwork Activities	.9120			$p < .068$
Transitions	.8834			
	Off-Task, Unsanctioned Scores			
Whole Class Activities	.0250	$p < .001$	$p < .001$	$p < .002$
Small Group Instructions	.0681		$p < .441$	$p < .021$
Individual Seatwork Activities	.0607			$p < .021$
Transitions	.0443			

Note: The number of teachers in all comparisons was 41. All p values are based on two-tailed tests.

Table 3

Analyses of Reader Ratings of Small Group Instruction for Better and Poorer Small Group Managers

Variable	Better Managers		Poorer Managers		p		
	Primary (n = 3)	Intermediate (n = 4)	Primary (n = 3)	Intermediate (n = 4)	Group	Grade	Interaction
*Teacher gives assignments orally (assignments not posted)	1.51	1.58	1.51	1.48			
*Assignments posted, Teacher does not go over orally	1.06	1.11	1.17	1.21			
*Assignments posted, Teacher goes over orally	1.42	1.30	1.21	1.25			
*Students get assignments in individual written contracts	1.00	1.07	1.00	1.00			
*Teacher gives assignments in small group	1.64	1.72	1.57	1.67			
Teacher states expected comportment of out-of-group students before group work begins or in between groups	2.58	1.92	1.76	1.13	.08		
Teacher states expected comportment of small group students while preparing to meet	1.69	1.25	1.62	1.46			
Teacher makes statements about how far students should get on assignments during a specific time period	1.88	2.12	1.25	1.67	.10		
*Teacher tells students what to do when they have finished with their seatwork assignments	1.53	1.26	1.39	1.14		.10	

Table 3, Continued

Variable	Better Managers		Poorer Managers		p		
	Primary (n = 3)	Intermediate (n = 4)	Primary (n = 3)	Intermediate (n = 4)	Group	Grade	Interaction
Teacher questions students to be sure they understand assignments	3.78	2.45	1.56	1.47	.001	.02	.03
*Teacher uses a bell to signal when it is time for a group to meet	1.33	1.00	1.00	1.00			
*Teacher goes to a certain location when it is time for a group to meet	1.26	1.67	1.05	1.25			
*Teacher tells students what materials to bring to group when she calls them to group	1.60	1.26	1.39	1.52			.07
*Teacher tells students what materials to bring to group when presenting instructions for group work	1.00	1.03	1.00	1.00			
Students move quickly and automatically into and out of small group	4.36	4.01	3.33	2.77	.01		
**Amount of time between when teacher calls for a small group and its beginning	3.72	3.36	3.51	3.07			
Students go up to teacher meeting with a small group when they need help	2.00	1.74	2.64	2.50			
Students sit in dead time when they need help while teacher is meeting with a small group	1.36	1.25	1.43	1.43			

Table 3, Continued

Variable	Better Managers		Poorer Managers		p		
	Primary (n = 3)	Intermediate (n = 4)	Primary (n = 3)	Intermediate (n = 4)	Group	Grade	Interaction
Students raise their hands when they need help while teacher is meeting with a small group	2.04	1.58	1.05	1.60			
Students turn in finished assignments to a special box or location	1.85	2.43	3.09	1.78			
Students place finished assignments in a folder at their desks	2.17	1.47	1.43	1.00			
Students do nothing specific with finished assignments	1.94	1.84	1.38	3.65			
Students hand finished assignments to teacher	2.32	2.22	1.64	1.42			
Assignments are checked in small groups	2.02	3.02	2.17	1.98			
Assignments are handed in, checked by the teacher	3.07	3.42	3.63	2.48			
Assignments are checked by the teacher individually with the student	1.94	1.77	1.70	1.04			
Between meetings with small groups, teacher gives help to students who request it	3.42	3.20	1.99	2.35	.09		
Between meetings with small groups, teacher checks on progress of students	2.89	2.80	1.52	1.97			

Table 3, Continued

Variable	Better Managers		Poorer Managers		p		
	Primary (n = 3)	Intermediate (n = 4)	Primary (n = 3)	Intermediate (n = 4)	Group	Grade	Interaction
Between meetings with small groups, teacher makes an academic presentation	1.21	1.45	1.39	1.00			
Between meetings with small groups, teacher does paperwork, searches for materials	1.37	1.08	1.91	2.07	.08		
Between meetings with small groups, teacher sits and waits for next group	1.60	1.17	2.77	1.51		.08	
Before dismissing a small group, teacher gives instructions for work	2.53	3.52	2.81	3.63		.04	
Before dismissing a small group, teacher gives students academic feedback	2.31	1.95	1.19	1.15	.005		
***Number of students who used post-assignment activities	1.89	1.34	2.28	1.48			
*When students finish assignments, they can play instructional games	1.13	1.00	1.10	1.00			
*When students finish assignments, they can play non-instructional games	1.00	1.00	1.29	1.00	.10	.06	.06
*When students finish assignments, they can use listening center	1.28	1.00	1.19	1.00		.007	
*When students finish assignments, they can color pictures	1.15	1.00	1.24	1.05		.08	

Table 3, Continued

Variable	Better Managers		Poorer Managers		p		
	Primary (n = 3)	Intermediate (n = 4)	Primary (n = 3)	Intermediate (n = 4)	Group	Grade	*Inter-action
*When students finish assignments, they can go to the library	1.00	1.12	1.14	1.15			
Amount of inappropriate behavior of out-of-group students	3.04	2.51	4.11	3.93	.02		
Amount of inappropriate behavior of in-group students	1.92	1.49	2.22	2.42	.09		
Amount of disruptive behavior of out-of-group students	1.82	1.42	3.05	2.41	.10		
Amount of disruptive behavior of in-group students	1.06	1.17	1.40	1.29			
Teacher is accurate in targeting students for inappropriate behavior	4.17	3.94	2.57	2.46	.002		
Teacher quickly stops inappropriate behavior of out-of-group students	3.74	3.97	2.29	1.85	.004		
Teacher handles out-of-group inappropriate behavior while seated with group, causing a disruption of instruction	2.21	1.91	2.95	2.62	.09		
Teacher makes desist statements to individuals in response to out-of-group inappropriate behavior	2.53	2.32	2.55	2.85			
Teacher uses non-verbal contacts in response to out-of-group inappropriate behavior	1.78	2.98	2.76	2.18			

Table 3, Continued

Variable	Better Managers		Poorer Managers		p		
	Primary (n = 3)	Intermediate (n = 4)	Primary (n = 3)	Intermediate (n = 4)	Group	Grade	Interaction
Teacher does not see out-of-group inappropriate behavior	1.71	1.68	3.42	3.28	.001		
Amount of out-of-seat movement of out-of-group students	2.90	2.37	3.93	3.56	.08		
Amount of out-of-seat movement that is off-task, unsanctioned	1.86	1.93	3.73	3.21	.001		
Amount of talking among out-of-group students	2.93	2.67	4.24	3.54	.08		
Amount of talking that is off-task, unsanctioned	2.56	2.57	3.69	3.80	.001		

* 1 = No; 2 = Yes (All nonstarred items have 5 point scales; 1 = No occurrence, 5 = Frequent occurrence)
** 1 = 5 minutes or more; 2 = 3-5 minutes; 3 = 2-3 minutes; 4 = 1-2 minutes; 5 = Under one minute
*** 1 = None; 3 = 10-12 Students; 5 = All or almost all